

Cannabis-Related Disorders Clinical Presentation

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History

With the publication of *DSM-5*, cannabis abuse and dependence are now considered part of the same substance use disorder, or simply, cannabis use disorder. When soliciting information related to marijuana use, both acutely and chronically, clinicians are advised to keep in mind the diagnostic criteria discussed below.

Cannabis intoxication

Cannabis intoxication, a cannabis-related disorder coded as 292.89, is defined by *DSM-5*, as the following:

- Recent use of cannabis
- Clinically significant problematic behavioral or psychological changes (eg, impaired motor coordination, euphoria, anxiety, sensation of slowed time, impaired judgment, social withdrawal) that developed during, or shortly after, cannabis use
- At least 2 of the following signs, developing within 2 hours of cannabis use:
 - Conjunctival injection
 - Increased appetite
 - Dry mouth
 - Tachycardia
- Symptoms not due to a general medical condition and not better accounted for by another mental disorder

Clinicians are instructed to specify if this is occurring with perceptual disturbances—hallucinations with intact reality testing or auditory, visual, or tactile illusions occur in the absence of delirium.

Cannabis use disorder

Cannabis use disorder, a cannabis-related disorder coded as 305.20 for mild or 304.30 for moderate or severe, is defined by *DSM-5* as the following:

- A problematic pattern of cannabis use leading to clinically significant impairment or distress, as manifested by at least 2 of the following, occurring within a 12-month period:
 - Cannabis is often taken in larger amounts or over a longer period than was intended.
 - There is a persistent desire or unsuccessful efforts to cut down or control cannabis use.
 - A great deal of time is spent in activities necessary to obtain cannabis, use cannabis, or recover from its effects.
 - Craving, or a strong desire or urge to use cannabis.
 - Recurrent cannabis use resulting in a failure to fulfill major role obligations at work, school, or home.
 - Continued cannabis use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of cannabis.
 - Important social, occupational, or recreational activities are given up or reduced because of cannabis use.
 - Recurrent cannabis use in situations in which it is physically hazardous.
 - Cannabis use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by cannabis.
 - Tolerance, as defined by either a (1) need for markedly increased cannabis to achieve intoxication or desired effect or (2) markedly diminished effect with continued use of the same amount of the substance.
 - Withdrawal, as manifested by either (1) the characteristic withdrawal syndrome for cannabis or (2) cannabis is taken to relieve or avoid withdrawal symptoms

Clinicians are instructed to specify the following:

- In early remission - After full criteria for cannabis use disorder were previously met, none of the criteria for cannabis use disorder has been met for at least 3 months but for less than 12 months (with an exception provided for craving).
- In sustained remission - After full criteria for cannabis use disorder were previously met, none of the criteria for cannabis use disorder has been met at any time during a period of 12 months or longer (with an exception provided for craving).

Cannabis withdrawal

DSM-5 provided criteria for cannabis withdrawal, coded as 292.0 and defined as follows:

- Cessation of cannabis use that has been heavy and prolonged (ie, usually daily or almost daily use over a period of at least a few months).
- Three or more of the following signs and symptoms develop within approximately 1 week after cessation of heavy, prolonged use:
 - Irritability, anger or aggression
 - Nervousness or anxiety
 - Sleep difficulty (ie, insomnia, disturbing dreams)
 - Decreased appetite or weight loss
 - Restlessness
 - Depressed mood
 - At least one of the following physical symptoms causing significant discomfort: abdominal pain, shakiness/tremors, sweating, fever, chills, or headache
- The signs or symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.

Compared with other illicit substances with clearly defined withdrawal states and associated symptoms, the definition of a cannabis withdrawal syndrome (CWS) had remained controversial. Previously, as no evidence was available of increasing tolerance associated with cannabis use, making the diagnosis of cannabis dependence with physiological dependence has remained controversial, if not impossible.

Although prior studies have attempted to illustrate the existence of CWS, these studies have had significant limitations. Additionally, until recently, there has been a dearth of any prospective studies assessing the occurrence of CWS. Recently, however, a prospective study focused on assessing the course of CWS symptoms among patients dependent on cannabis who were seeking detoxification. This study seems to support evidence of a clinically relevant CWS that the authors qualify as "only expected in a subgroup of cannabis-dependent patients."^[28] Its definition and inclusion in *DSM-5*, is consistent with the symptoms described by these researchers. While *DSM-5* defined the timeframe as occurring within 1 week after cessation of prolonged, heavy use, the authors of this prospective study on CWS specified symptoms are believed to occur following a 24-hour period of abstinence, peaking at day 3 following abstinence and lasting 1-2 weeks.^[28, 29]

The authors recommended subgrouping cannabis-dependent patients undergoing detoxification into those with no or only very mild CWS and those with moderate-to-strong CWS. Risk factors that seemed to predict which subgroup patients could be classified by included recent cannabis intake and last amount of cannabis consumed prior to hospitalization, with patients reporting recent and more cannabis consumption before hospitalization as more likely to report symptoms of CWS.^[28] A withdrawal scale predicated on a study of 49 cannabis-dependent subjects may have reliability in assessing the severity of cannabis withdrawal symptoms.^[30]

Other cannabis-induced disorders

Cannabis intoxication delirium

Cannabis intoxication delirium, a cannabis-induced disorder coded as 292.81, relies on the definition of delirium and this diagnosis is appropriate when the following 2 symptoms predominate:

- Disturbance in attention (ie, reduced ability to direct focus, sustain, and shift attention) and awareness (reduced orientation to the environment)
- An additional disturbance in cognition (ie, memory deficit, disorientation, language, visuospatial ability, or perception)

Cannabis-induced psychotic disorder

Cannabis-induced psychotic disorder is coded as 292.9 and defined by *DSM-5* as follows:

- Presence of one or both of the following symptoms:
 - Delusions
 - Hallucinations
- Evidence from the history, physical examination, or laboratory findings of either one of the following:
 - The symptoms in the first criterion developed during or soon after substance intoxication or withdrawal.
 - The involved substance is capable of producing these symptoms.
- The disturbance is not better accounted for by a psychotic disorder that is not substance induced. Evidence that the symptoms are better accounted for by a psychotic disorder that is not substance induced might include the following:
 - The symptoms precede the onset of the substance use (or medication use).
 - The symptoms persist for a substantial period (eg, about a month) after the cessation of acute withdrawal or severe intoxication or are substantially in excess of what would be expected given the type or amount of the substance used or the duration of use.
 - Other evidence suggests the existence of an independent non–substance–induced psychotic disorder (eg, a history of recurrent non–substance–related episodes).
- The disturbance does not occur exclusively during the course of a delirium.
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Cannabis-induced anxiety disorder

Cannabis-induced anxiety disorder, categorized as a cannabis-induced disorder and coded as 292.89, is defined by the *DSM-5* as follows:

- Panic attacks or anxiety predominate in the clinical picture.
- Evidence from the history, physical examination, or laboratory findings of either of the following:
 - The symptoms in the first criterion developed during or soon after substance intoxication or withdrawal.
 - The involved substance is capable of producing the symptoms in the first criterion.
- The disturbance is not better accounted for by an anxiety disorder that is not substance induced. Evidence that the symptoms are better accounted for by an anxiety disorder that is not substance induced might include the following:
 - The symptoms precede the onset of the substance use (or medication use).
 - The symptoms persist for a substantial period (eg, about a month) after cessation of acute withdrawal or severe intoxication or are substantially in excess of what would be expected given the type or amount of the substance used or the duration of use.
 - Other evidence suggests the existence of an independent non–substance–induced anxiety disorder (eg, a history of recurrent non–substance–related episodes).
- The disturbance does not occur exclusively during the course of a delirium.
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Cannabis-induced sleep disorder

DSM-5 defines this as follows:

- A prominent and severe disturbance in sleep.
- There is evidence from the history, physical examination, or laboratory findings of both of the following:
 - The symptoms in the first criterion developed during or soon after cannabis intoxication or after withdrawal from or exposure to it.
 - Cannabis is capable of producing the symptoms in the first criterion. The disturbance is not better explained by a sleep disorder that is not substance/medication induced. Such evidence of an independent sleep disorder could include that symptoms precede the onset of the cannabis use; symptoms persist for a substantial period (ie about a month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence suggesting the existence of an independent nonsubstance/medication-induced sleep disorder (ie, a history of recurrent nonsubstance/medication-related episodes).
- The disturbance does not occur exclusively during the course of delirium.
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Unspecified cannabis-related disorder

Coded as 292.9, this category applies to presentations in which symptoms characteristic of a cannabis-related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any specific cannabis-related disorder or any of the disorders in the substance-related and addictive disorders diagnostic class.

Physical

A thorough mental status examination is an integral component of every patient assessment. Key mental status findings associated with cannabis use, cannabis-induced, and cannabis-related disorders include the following:

- **Mood:** Acute use may be associated with feelings of euphoria, uncontrollable laughter, increased appetite, and difficulty concentrating. In chronic use or withdrawal, patients may report a depressed mood characterized by apathy, lack of motivation, irritability, loss of interest in typical activities, difficulty concentrating, and possibly isolation.
- **Affect:** Acutely, affect may span the spectrum from euphoric to anxious. In chronic use, affect may be constricted or flat.
- **Thought process and content:** As in any mental status examination, assessing the patient for the presence of suicidality or homicidality and taking appropriate action is critical. Patients may demonstrate flight of ideas, loose associations, and, in some cases, delusions and hallucinations.
- **Cognition:** In both acute and chronic use, difficulty concentrating and memory impairment are common.

Physical signs and symptoms associated with cannabis use are particularly relevant to the diagnosis of cannabis intoxication. Clinicians are advised to identify at least 2 or more of the following physical symptoms, occurring within 2 hours of cannabis use, as defined by *DSM-5* criteria:

- Conjunctival injection
- Increased appetite
- Dry mouth
- Tachycardia

Additionally, patients may demonstrate physical symptoms associated with cannabis withdrawal syndrome.

Other adverse physical and psychological manifestations associated with marijuana abuse are as follows:

- Sweating
- Headaches
- Restlessness
- Forgetfulness

- Visual distortions
- Lack of concentration
- Paranoia
- Mood changes
- Perceptual changes
- Feeling impersonal
- Panic disorder
- Amotivational syndrome
- Delusions
- Psychosis

Causes

Risk factors among adolescents that may increase the likelihood for marijuana abuse include the presence of comorbid substance use and environmental stressors, including difficulty in school.

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